

Chapter 6

Freedom and Economic Growth

I doubt if one can cite a single example of any people engaged in both manufacture and trade, from the men of Tyre to the Florentines and the English, who were not a free people.

Alexis de Tocqueville

If there is one thing more than any other which public policy requires, it is that men of full age and competent understanding shall have the utmost liberty of contracting, and that contracts, when entered into freely and voluntarily, shall be held good and shall be enforced by courts of justice.

Sir George Jessel

An individual may have possessions, in the sense that a dog possesses a bone, but there is no private property without government.

Mancur Olson

Until now, I have claimed that progress was not simply economic growth. More goods and services, depending on one's interpretation, may or may not be an advancement for mankind. On the other hand, economic development is probably the driving force behind all true progress. It is difficult to envision any improvement in the well-being of *Homo Sapiens* not associated with a rising standard of living for the majority of the populace. Although basic constituents of progress such as longer life spans, declining infant mortality, and increased literacy can be separated conceptually from growth, it is clear that economic advancement leads to higher incomes which in turn lengthen life expectancies and reduce infant deaths. Increased literacy is likely to spur growth and to result from it.

Thus factors that further economic development are apt to, but need not, augment progress. As mentioned in chapter 1, a rise in GNP may or may not reflect real growth and an improvement for human beings. If an increase in national income comes at the expense of the environment or simply reflects the transfer of more activities from the home to the marketplace, where they are counted in national income statistics, neither progress nor a rise in real incomes may have occurred.

Although virtually all would agree that there is a strong association between high incomes and long life spans, low rates of infant mortality, and higher literacy rates, some such as economist Amartya Sen (1984; 1985), have argued that these benefits can be

achieved by relatively poor countries. If governments invest in public health and education, many if not all of the benefits of economic expansion can be achieved without growth. Economists Sudhir Anand and Martin Ravallion (1993) have examined this proposition and found that while life expectancies and infant mortality can be significantly improved by state programs alone, education and literacy is much harder to achieve. They found that mounting affluence generates resources that then become available for public health and a reduction of poverty. Moreover they find that improved literacy boosts average income even if expenditures on education and reducing poverty are held constant. Thus the benefits from growth cannot be achieved simply through state action.

Economic Growth and Well-being

The relationship of mushrooming output to individual well-being is complex and inherently unmeasurable. If one considers the long run, as this book does, then additional goods and services per person usually involve material changes in other elements of life, which may or may not augment the gain. Typically economists assume (Abramovitz 1959, Ch. 1) that increases in income generate smaller and smaller increments in human satisfaction. This suggests that the doubling of real income per person in the United States from 1820 to \$764* in 1870 provided a significantly larger improvements in well-being than the nearly doubling of income from the much higher levels in 1950 to \$6055* in 1979 (Maddison 1982: 8).

A sustained rise in the living standards of the masses is relatively new phenomena in world history. Philosophers and theoreticians since Adam Smith have attempted to explain this sudden upsurge in command over resources. Many economists, such as Michael Boskin and Lawrence Lau (1992: 18-20), view the growth rate of an economy as the sum of the contributions of capital, labor and technology. Population growth, which in the long run may be affected by the performance of the economy and its relative prosperity but is not subject to simply manipulation, determines the additions to the labor pool and hence the work force's contribution to development. The macoeconomic situation, including government deficits, inflation and tax policies, influences the amount of investment and consequently capital's additions to higher productivity. Technology, the third constituent of growth, emanates from human inventiveness. To offer opportunities for innovation, economic freedom for experimentation is indispensable. Liberty also plays a large role in determining capital investment. Without strong property rights inherent in economic freedom, few will risk major investments on long run projects.

* 1970 dollars.

We can learn much about *The Wealth of Nations* from history. Angus Maddison (1982) examined economic growth since 1820 for sixteen countries — mainly Western economies and Japan. He concludes (4) that over the 160 year period from 1820 to 1980, the total product of these sixteen countries “increased sixty-fold, their population more than four-fold, and their per capita product thirteen-fold.” It is worth noting that all sixteen countries are today democratic with widespread freedoms, a significant change from 1820. At the same time, Maddison reports (4) that “Annual working hours were cut from around 3,000 to less than 1,700 ... [and L]ife expectation doubled from about thirty-five to over seventy years.” The average level of education climbed sharply over this period. He affirms (16) that in 1820, the average worker had spent only two years in school whereas by 1980, the typical person in the labor force had benefited from ten years of education.

Maddison (1982: 6) divides the last 1500 years into three periods. During the first thousand years, from the fall of Rome to 1500, the population inched upwards at a rate of only 0.1 percent per year and income per capita failed to expand at all.* Over the next two hundred years, the population growth rate doubled to 0.2 percent per year and national income per capita crept up at a rate of 0.1 percent. After 1700 the rate of increase in both population and income accelerated, with income per head climbing at a rate of 0.2 percent to 1820, then ballooning to 1.6 percent per year from early in the nineteenth century to modern times.

Economic growth, at least in the advanced countries, relies largely on innovations and scientific progress. Study after study has concluded that the main engine of growth is technological change. As Simon Kuznets, one of the pioneers in empirical research on growth, points out (1973: 185-211), a new invention produces totally unforeseeable consequences. No one knows where one innovation will lead. The invention of the steam engine prompted the development of railroads, which in turn reduced transportation costs, and made large scale agriculture profitable and practicable. This fostered a consolidation of farms and a movement of the population from rural areas to the city, with implications discussed below.

That innovation and its consequences are unknowable means that innovation lies beyond the reach of the planner. No central authority can direct growth. It emerges spontaneously as a result of millions of individuals reacting on their own to new opportunities and new situations. Economic expansion, therefore, requires a liberal

* On the other hand, David S. Landes, a professor of history at Harvard University maintains (1969: 14) that from the year 1000 to the eighteenth century incomes per head rose substantially and may even have tripled.

marketplace, one in which people are able to innovate as they see new costs and potential gains.

Economic progress can reflect innovations that either reduce costs or yield new categories of goods or services. The difference may sometimes be unclear. Did the development of air travel simply lower the cost of transportation or did it introduce a new service? In either case it improved the well-being of humans.

A decrease in the costs of manufacturing a given good or offering a service must be beneficial to the public — it leaves people with more resources to spend on other wants. On the other hand, critics of the modern consumer society often question the lasting value of a *new* product or service. Is the consumer lured into its purchase because of advertising? Is his acquisition simply an effort to “keep up with the Joneses?” Is this commodity a fad that the spoiled affluent will buy as a novelty and quickly tire of? Many products may fit these descriptions, but most of the enduring goods in the marketplace appear to satisfy basic needs. People in virtually all countries desire indoor plumbing, automobiles, refrigerators, washing machines, telephones, television, central heating, in warm climates airconditioning, and, as soon as they are affluent enough, dishwashers. Even citizens of communist countries who were not subject to advertising and enjoyed few opportunities to “keep up with the Joneses” acquired these products as soon as they were able.

An expansion of consumerism is likely to include other products and services less obviously desirable, products which many may question. Are leaf blowers progress? Do microwaves, trash compactors, answering machines, VCRs, FAX machines, and voice mail all contribute to the betterment of mankind? A change in fashion may lead many people to purchase a new wardrobe; is this progress? Consumers will be no happier with the now fashionable outfits, than they were with the then fashionable clothing.

Nevertheless it is too easy for intellectuals who see themselves as an elite, to criticize the foibles and the consumption of the masses. A leaf blower may not spell progress to people who are trying to sleep or meditate quietly, but it provides a useful service to its owner or operator. Other products may make life easier, more pleasant, or save on time or labor. Fashions let individuals set themselves apart from earlier periods and exhibit their wealth and their knowledge of *what's in*. Moreover, the existence of some gadgets widely considered as wasteful may be a necessary cost of a free society. Who is to decide what is valuable to human well-being and what is superfluous junk? The public shows by its actions that men and women prefer a consumer-based society to one without that option.

Consumerism has its limits. As incomes grow, the proliferation of goods reduces the value of additional commodities. Moreover, the addition of more and more consumer

products, however, drains away the time available to enjoy such goods. Thus even if conceptually we could produce enough products to satisfy all demands too little time would be available to enjoy them. Thus no matter how much economic growth an economy savors, the utopia of totally fulfilled needs is impossible.

A consumer society or rather a society that admits social freedom entitles individuals to ignore the proliferation of goods and services and to lead abstemious lives. Those that prefer to eschew the latest gadget, forgo the highest tech electronics gismo, and ignore the dictates of fashion are at liberty to do so. A free society by definition allows each to choose the style of life that he or she wishes.

Social and economic freedom offer the opportunity for people to participate as they wish in a consumer society. People can elect the type of life each prefers. Those that have a taste for music can invest in stereo equipment, concerts, and musical instruments; those with a love of hunting can spend their resources on guns and duck blinds. A society that restricted consumers' options would curtail social freedom. In effect, it would close off certain life styles.

Income Comparisons over Time

Abstracting from longer life spans and improved health, can we conclude that the average American who, in 1820, enjoyed few consumer goods was less well-off than his counterpart of 1979 with a plethora of products? Most other characteristics of life besides the availability of modern appliances have changed. In 1820, land in the West was virtually free; government was small, unimportant, and unintrusive. Violent crime, at least in the established East Coast cities, appears to have been much less prevalent. Families were more stable: divorce was rare and out-of-wedlock births, uncommon. On the other hand, slavery was practiced in the South. Women had few rights and even freed blacks, virtually none. The workweek may have been double the hours of its current level. According to Stanford economist Moses Abromovitz (1959: 19), leisure time was equal to about half of working hours while today it is about twice as much.

The decrease in the workweek appears to be a major gain for Americans, yet many individuals consider the supposed increase in leisure to be illusory. In this "free time," workers repair their homes, minister to the needs of their children, maintain their cars and other vehicles, and take care of paper work, such as paying bills and dealing with the Internal Revenue Service. Moreover, the options available for recreation are so great that allocating whatever true leisure time exists can actually induce stress. On a Sunday afternoon, in addition to the type of chores mentioned above, a man or woman may face the choice of hang-gliding, attending a football game, seeing the latest Woody Allen film, reading a book, keeping up with the latest news on CNN, working on his or her hobby,

taking a walk, or playing with the children. In 1820, the individual would only have had to choose among the last three. Life was slower and more involved with people than with things.

How can we interpret the average income of \$1360* per year in 1820, a number about one-fifth the current poverty level for a single individual? Does the \$1360 figure mean that the average citizen subsisted as a person with that income would in 1992. It is difficult to believe that anyone could currently survive on such a sum — we would consider such an existence abject poverty. This annual income is equivalent to a little less than four dollars a day. Could one purchase enough food to survive with this pittance? Rent for an apartment or house or even maintenance of living quarters in 1992 would likely run more than the equivalent \$110 per month. The average incomes in Colombia, Egypt, and Turkey today are higher than those of Americans in 1820. Yet we all feel that the people of the United States were prosperous and well-off in 1820, rather than impoverished as many are in these Third-World countries.

These dollar figures must understate how well-off people were in past periods. In the nineteenth century, individuals normally manufactured themselves many items currently purchased in the marketplace. Much of America was rural, paid no rent, built their own homes, grew much of their food and stitched a substantial portion of their clothing. Thus the little cash income available went for what would have been considered luxuries and a few items, such as nails, pots, and cooking utensils, that could not be fabricated on the farm.

The problem becomes even more pronounced when comparing living standards in modern times with those in ancient civilizations. Oxford economist Colin Clark alleges (1957: 654) that real wages in ancient Greece differed little from those in the West during the 19th century. According to Clark (677), the average output per worker was “in the neighborhood of” \$4,000* per year. At the same time, he reports (675) that the average landowner was earning about \$15,000 per year. His figures imply, however, that real wages failed to grow after around 300 BC and undoubtedly must have fallen after the fourth century AD. Clark also details (679) that the average yield per hectare remained the same in Egypt from ancient times until the early part of this century — there was no advancement in productivity for over three millennia!

Given the totally different life styles between ancient Greece, with an economy based on slavery and trade and the modern world where industrialization and technology are dominant, can we believe Clark when he asserts that real incomes were comparable. In

* In 1992 dollars.

many respects living conditions for peasants subsisting near the Nile in the twentieth century differ little from those of their ancestors in ancient Egypt — except that radios are now ubiquitous, an incredible range of goods is available at the local market, and government authorities not only understand the importance of sanitation but have conveyed that knowledge even to the many still illiterate farmers. Through radio, television, and increased literacy, knowledge of the world and of science has spread to the most backward portions of the globe. Surely expanding the horizons of destitute peasants constitutes progress and an improvement in well-being for humanity.

Growth Rates

Economic growth has been the spearhead of progress. Without growth there would have been little or no improvement in human well-being. As an earlier chapter concluded most of the betterment of mankind has occurred in the last few centuries — a time when economic development has spurted in the West. Most of that advancement in mankind's well-being has arisen in countries that have undergone strong economic expansion and enjoyed sizable improvements in their standards of living. This gain has largely coincided with the Industrial Revolution and the augmentation of science and technology. Table 4-1 displays growth rates of those countries for which records of national income have been kept for the longest periods of time.

These data demonstrate that the rate of economic growth has been accelerating. In the earliest period, 1700 to 1820, figures exist for only three countries, but, as the predominant world traders, England, France, and the Dutch are the nations most likely to have enjoyed the greatest expansion in business activity. The numbers show what we would now consider an anemic improvement in output per capita. In the next fifty years, as the Industrial Revolution took hold and spread, growth increased to a rate of over 1 percent per year per person. From 1870 to the start of World War I, industrial output per person mushroomed further and spread to a broader group of countries. From 1913 to 1979 — 66 years — the rate of expansion in income per capita accelerated to nearly double the rate a century earlier. The last decade, from 1979 to 1989, is too short for any meaningful conclusions about long term trends. As Simon Kuznets avowed (1955: 16), “a period not much shorter than half a century is desirable” for judging economic performance.

Figures for the United States alone show the same acceleration in growth. Economic historian Thomas Weiss in a careful reexamination of data on pre-civil war America finds (1989: Table 6) that the annual rate of growth of output per capita grew at a rate of only 0.8 percent in the period 1800 to 1840, but the rate doubled to 1.6 percent for the next twenty years. Since the civil war, U.S. output expansion per person has ballooned to 1.9 percent per annum.

**Table 5-1
Growth Rates of Gross Domestic Product per Capita**

	1700- 1820	1820- 1870	1870- 1913	1913- 1979	1979- 1989	1870- 1989
Argentina			1.5%	1.2%	-3.0%*	1.0%*
Australia			0.6%	1.4%	1.6%	1.1%
Chile			1.9%	1.1%	0.6%*	1.3%*
United Kingdom	0.4%	1.5%	1.0%	1.6%	2.1%	1.4%
Portugal			0.3%	2.1%	2.0%	1.4%
New Zealand			1.2%	1.6%	1.4%	1.5%
Netherlands	-0.1%	1.5%	0.9%	2.0%	1.0%	1.5%
Ireland			1.0%	1.9%	1.1%	1.5%
Belgium		1.9%	1.0%	1.8%	1.6%	1.5%
Switzerland		1.7%	1.2%	1.9%	1.7%	1.6%
Spain			0.4%	2.5%	2.3%	1.7%
Italy			0.8%	2.2%	2.3%	1.7%
Denmark		0.9%	1.6%	2.1%	1.5%	1.8%
France	0.3%	1.0%	1.5%	2.1%	1.5%	1.9%
Austria		0.7%	1.5%	2.1%	2.1%	1.9%
United States		1.4%	2.0%	1.8%	1.7%	1.9%
Canada			2.0%	2.0%	2.0%	2.0%
Norway		1.0%	1.3%	2.6%	3.2%	2.2%
Sweden		0.6%	2.1%	2.4%	1.7%	2.2%
Finland			1.7%	2.6%	3.1%	2.3%
Germany		1.1%	1.6%	3.2%	1.8%	2.5%
Japan		0.0%	1.5%	3.4%	3.5%	2.7%
Average Rate	0.2%	1.1%	1.3%	2.1%	1.7%	1.8%
* 1979-1988 or 1870-1988.						
Sources: Maddison, 1982, Appendix A & B; De Long, 1988, p. 1152; <i>Statistical Abstract of the United States</i> , 1982-83 & 1991.						

This accelerating growth reflects the snowballing rate of technological progress. As understanding of science and technology has burgeoned and spread so has the ability to produce more and more goods with less and less human labor. As long as the rate of growth of scientific knowledge continues to accelerate, output per capita should also continue to escalate, perhaps even quickening its pace.

This data on growth dramatically demonstrate that economic expansion is spreading to more and more countries, taking in more and more of the world's population. During the eighteenth century, income per head in England, perhaps in France, and, somewhat more problematically, in the Netherlands, was inching up. By the first half of the nineteenth century the list of "progressive" countries had multiplied to eleven, although their rate of growth were sluggish by modern standards. By the end of the century all 22 states for which we have data were on an expansion course. Since the Second World War, several

other economies, mainly Asian, have joined the primarily European and European offshoot nations as fast developers.

These data fail to substantiate, however, whether countries that have enjoyed more liberty — political, social and economic — have also luxuriated in faster material progress. It is my belief that the more economic freedom, the more growth; but we have no really satisfactory measures of economic liberty to test this hypothesis. A good indicator would gauge such factors as regulation, taxation, labor laws, state ownership of enterprises, legal rules for conducting business, and the licensing of new firms. Economists James Gwartney, Walter Block, and Robert Lawson have created the best index to date with measures of monetary instability and inflation, the size of the government, property rights, and restraints on international trade (Easton and Walker 1992). Their combined measure of economic rights for the years 1975, 1980, 1985 and 1988 is only weakly correlated with the rate of growth for 71 countries over the same period, but the positive relationship is unlikely to have occurred by chance. The authors point out (166) that the average annual growth rate for the 15 countries that rated highest in terms of economic freedoms was 3.7 percent almost three times the meager 1.3 percent rate for the 15 least liberal states.

Harvard historian David Landes (1969) contends that the prevalence of individual businesses in Europe gave birth to innovation, risk taking and economic growth. He claims (15) that “The role of private economic enterprise in the West is perhaps unique: more than any other factor it made the modern world.” His argument applies to economic advancement everywhere: all states that have enjoyed vigorous development have relied primarily on free enterprise. The private market in turn requires economic freedom, the right to open a business, to sell at whatever price the market will allow, and to negotiate with suppliers and customers.

The material advancement of Western Europe points to the significance of secure property rights as underpinning economic freedom. In the Middle Ages, kings claimed control over all property and requisitioned sporadically whatever they needed. This led merchants to conceal their assets and to be reluctant to invest in major enterprises. As property rights became increasingly assured, tradesmen and industrialists felt secure enough to put their private capital into businesses with long term payoffs. Growth was the outcome.

In much of the rest of the world, especially Asia and the Muslim countries, potentates and monarchs circumscribed economic security, hence freedom, much more than in medieval Europe. Rulers realized a ready source of funds in fines and exactions; such assessments also kept merchants in their “place.” In these countries, as a consequence, the wealthy invested their money in land, rather than business. Real property provided greater

security and was less subject to confiscation than liquid assets. Moreover, an estate often brought with it political power and protection for the owner's family.

Nor did Europe offer a totally free economic environment. Governments and the leaders of the medieval professions imposed strict controls on business activity. Custom or law fixed the prices of staples and a multitude of restrictions circumscribed the alienation of land. The authorities discouraged innovation — novel ways of manufacturing were treated with suspicion. Guilds limited entry into favored occupations. Nevertheless, in Europe the state accorded private enterprise a wider scope than did countries elsewhere in the then developed world. As Landes (1969: 19) described it:

For all that, the scope of private economic activity was far larger in western Europe than in other parts of the world and grew as the economy itself grew and opened new areas of enterprise untrammelled [sic] by rule or custom. The trend was self-reinforcing: *those economies grew fastest that were freest. ... those economies that were freest seem to have been most creative; creativity promoted growth.* [emphasis added]

As I argued in the previous chapter, economic freedom is a necessary condition for political liberty and democracy, although it is not a sufficient condition. The table on rates of economic growth (4-1) shows no relationship between democracy and economic development. Japan and Germany expanded the fastest over the twelve decades, and neither was famous over the same period for its democratic tendencies. Even though Germany and Japan lacked democratic institutions, they nevertheless benefited from a relatively free market — one based on private property — which may have spurred their economic progress. On the other hand, Great Britain, Switzerland and the United States, liberal democracies for the entire 120 years, experienced poor to average rates of economic advancement.

Although a few of the countries listed in Table 4-1 have only recently thrown off autocratic regimes, all are currently democratic. Moreover, most of the economies that developed the most rapidly since 1870 have also enjoyed elected governments in the past half century. Only Spain, Portugal, Chile, and Argentina have suffered dictators since 1945, and they have eliminated them in the last two decades.

High incomes and strong economic growth lead to political stability, a potentially important factor in attracting investment. Using data for 121 countries for the post-war period, economists John Londregan and Keith Poole (1990) examined the relationship of income and the rate of growth in per capita income on the probability of a coup d'état. They found that the better-off the population and the more rapid the expansion of the economy, the lower the likelihood of a coup. These researchers conclude (151) that “coups are 21

times more likely to occur in the poorest countries ... than among the wealthiest.” On the other hand, they also report that government overthrows had no significant impact on growth rates.

Some social scientists have argued that democracy reduces the rate of growth by leading to weaker governments unable to make the hard decisions necessary for economic efficiency. Other researchers have contended that democracy promotes more widespread public involvement and makes government errors subject to quick exposure, thus leading to faster growth. Still others claim that there is little relationship between economic expansion and a democratic or authoritarian government.

Mancur Olson (1992a), among other economists, has reasoned that secure property rights, a government of laws not discretion, and protection of individual rights are also essential to a well functioning economy. Dictatorships are inherently less efficient, he asserts, because the ruler can change the rules of the game at will. On the other hand, Olson recognizes that many authoritarian regimes have provided sufficient credibility to allow long-term contracts to evolve thus making possible an efficient market.

Nevertheless, if one accepts Olson’s argument, democratic regimes, which almost always have a superior record of respecting individual rights, should foster better economic performance than dictatorial states. On the other hand, elected governments are more subject to pressures from special interests and thus often lower economic efficiency by attempting to help favored individuals, firms or industries. Often those helped are industries or companies that are failing in the marketplace. Taxing the efficient winners to help the losers, Olson points out, impoverishes the economy. Thus on a theoretical level the effect of democracy on material progress remains ambiguous.

Quantitative studies have also failed to establish a strong relationship between democracy and income expansion. Larry Sirowy and Alex Inkeles (1990) reviewed the evidence from thirteen empirical studies that examined the relationship of democracy, variously measured, and economic growth for different post-Second World War periods. This body of research, they concluded, did not demonstrate that democracy promotes more rapid material progress but it also failed to prove that popular government retards expansion. According to the authors, however, all of these analyses embody significant drawbacks in terms of methodology, research design, and measurement problems.

In a separate study, John Helliwell of the National Bureau of Economic Research scrutinized (1992) the link between elected governments and economic performance. He concluded that the evidence fails to support the proposition that the existence of democracy affects either positively or negatively subsequent development. On the other hand, he

determined (21) that countries enjoying high incomes “are more likely to have democratic forms of government.”

On the basis of both theory and the empirical evidence, we can conclude that the link between democracy and economic growth is unclear. Apparently while elected governments fail to boost the rate of growth, such regimes also do not deter economic progress. Seemingly development depends on a number of other variables.

For advanced countries economic advancement reflects mainly the growth in technology that increases product per unit of input. Such technology is generally incorporated into physical and human capital. In order to enhance productivity, therefore, business must risk their funds on plants and equipment and society must invest in education. Investment itself depends on opportunity, the cost of capital, and a reasonable regulatory environment. If there is ample economic freedom, men and women seeking to better themselves will continually search out new possibilities for creating profitable enterprises. Technology and the science, which underlie technology, are the product of research and development, which in turn require the liberty to experiment. Economic freedom is therefore a key element in growth.

Those countries, not in the forefront of economic development, generate rising standards of living often by incorporating already known technology and techniques from more advanced nations. These “catch-up” states can achieve significant growth simply by moving labor from low productivity sectors, such as agriculture, to areas with greater output per worker. In addition, those nations that have subjected their economies to competition in the world market have done considerably better at fostering development than those which have sheltered their industries.

The problem for both advanced countries and those attempting to catch-up is that rationalizing their economies, that is deregulating, privatizing, and de-monopolizing their industry, may be necessary to generate strong growth. Doing so steps on the toes of vested interests. Those firms or families that have local monopolies or preferred positions will fight to maintain their advantages. As Mancur Olson emphasized in *The Rise and Decline of Nations* (1982) rigidities multiply within countries as special interests secure exceptional privileges; these immunities from competition become very difficult to remove. In all parts of the world, barriers to rationalizing resources are strong.

Costs of Growth

Simon Kuznets, one of the major post-war students of the factors determining national income growth, lists (1973: 167-171) six characteristics of modern economic expansion. First, high income countries have experienced very rapid increases in output per person and in population. Second, the phenomenal explosion in productivity per worker

has been so great that it has permitted a reduction in the hours of work while boosting the amount of goods and services available for the total population. Third, the advanced economies have changed structurally, shifting away from agriculture to manufacturing and more recently to services. At the same time, major international corporations have displaced small family-based enterprises. Fourth, society has become increasingly urban bringing about a shift to a dominant secular ideology. Fifth, the advanced countries with modern technology have tied the world together with instantaneous communication and rapid transportation. Never before has the earth been so united and so interdependent. Sixth, only about one-quarter of the world is enjoying much of the fruits of advanced technology.

Growth means change, but, as Kuznets points out, not all groups benefit equally or at all. Change disrupts the status quo, and those who were the chief beneficiaries of the existing system often lose from growth. In addition, the shifts in resources and the innovative products and techniques inherent in economic advancement are costly. For a farmer to move to the city, a buggy whip manufacturer to shift to making fenders, an artisan to become a factory worker — these require major and costly measures. Sometimes individuals are unable to make these adjustments, but, even when they can, the adaptations are almost always traumatic and expensive. On the other hand, despite the disruptions, rapid development increases people's contentment with their lot. Studies of happiness (Veenhoven 1984: 152-154) have demonstrated that the public in rapidly growing economies often report higher levels of satisfaction with life than people in less rapidly growing countries. Thus the costs of rapid change have been exaggerated and the benefits, which include not only a higher standard of living, but also an improvement in people's emotional well-being, are too often undervalued.

Modernization, Kuznets emphasizes, produces unpredictable and virtually unlimited change. No one can predict where it will lead and whom it will affect. Each major innovation — the steam engine, electricity, the internal combustion engine, and the computer — has sowed the seeds of further metamorphoses, and these in turn have induced unforeseen shifts in human relationships and institutions. Over the last century all the advanced countries have suffered an upsurge in urbanization, a heightened instability of marriage, and a substitution of impersonal market relations for personal dealings.

Modern growth, for example, has diminished radically the role of farming. Once agriculture absorbed the energies of nearly three-quarters of the population, today in the United States less than 3 percent of the labor force is involved in producing our food plus a surplus for the rest of the world. The shrinking number of farm workers has imposed large costs on growers, with many being forced to abandon their traditional rural ways and move to teeming cities. During the Middle Ages, this typically meant leaving a relatively safe and

sanitary existence for a world of crowding and poor sanitation, rife with disease and early death. Today urban areas offer a sanitary environment, but one in which crime is more prevalent, the air is more polluted, and relationships are more impersonal.

On the other hand, a move to the city intensifies stimuli — especially intellectual — for all categories of tastes. Large cities possess major advantages over thinly populated regions — many more diverse desires can be satisfied. City shops cater to fancies for specialty foods, unusual garments, and rare antiques. Large urban areas offer a wide variety of art — Renaissance to contemporary; music — from jazz, rock, and folk to medieval Gregorian chants; and entertainment — movies, plays, operas, ballets to comedy clubs. Restaurants tempt the diner with dishes from around the world. The modern metropolis presents numerous opportunities for skilled craftsmen and the possibility to improve one's training and education.

Thus urbanization, one of the major consequences of economic development, has both benefits and drawbacks. Some will see the anonymity, risk of crime, dirt, and foul air as disadvantages offsetting the good things brought by specialization and concentration of population. Such people will probably avoid cities; often by trying to combine the advantages of a more rural life — the suburbs — with urban employment. Others may choose to shun cities completely. Apparently, however, the majority finds the utility of cities outweighing their handicaps, otherwise, urban areas would cease growing and attracting some of the most talented and enterprising of each generation.

As a result of rapid development, the role of women in the work force has altered dramatically. For a variety of reasons including improvements in technology that have made physical strength less important and the increased importance of the service sector, job opportunities for “the weaker sex” has ballooned with economic progress. As females have moved into the labor market, they have become less dependent on men for their well-being and hence more able to sever unsatisfactory marriages. This in turn has led to a change in marriage laws in most advanced countries to permit easier divorce, the consequences of which were discussed in an earlier chapter. Such laws have allowed not only wives to dissolve unions but husbands as well. Ease of separation has, in turn, impelled more women to secure careers or, at a minimum, marketable skills as insurance against desertion by the “bread winner.” With more marriages breaking-up and with wives enjoying longer life spans than their spouses, the chance that a mother will have to support herself and her children has grown in recent decades. This feedback mechanism has helped propel women into the job market.

The shift in females' status has benefited some women and some men and adversely affected others. Part of the resistance to modern society so obvious in much of

the world stems from the realization that economic growth leads to fundamental and disturbing changes. For traditional societies, feminism, the ideological representation of the increased participation of women in the work force, is disruptive and revolutionary.

Development has substituted market relations for personal relations. Employers now fill jobs on the basis of education, ability, and suitability. In the past people's employment depended on the status of their families, and custom often required sons to follow the occupations of their fathers. The substitution of the impartial marketplace for family, status, and tradition is resisted by many, objected to by some, and regretted by a large number.

The changing character of employment highlights one of the major drawbacks of the modern world, its increasing impersonality. We are all numbers in one computer or another. Our mail comes addressed to "resident;" anonymous telemarketers touting the latest investments disturb our dinners; and banks assign us code numbers to access our own money. Our lives are spent trucking with, selling to and buying from strangers or casual acquaintances forced on us through our jobs or our schools. Marx criticized capitalism for breeding workers' alienation; actually the private market did not beget disaffection but large scale modern enterprises, as proved by the desperate alienation in the gigantic Soviet Union factories, did.

Let me end this section by alleging that one of the major effects of economic change has been to lower the rate of growth in real income of the "upper" classes, thus reducing income inequality. As real incomes have risen for the population at large, the cost of labor has gone up as well, thus benefiting the working poor. The rich, traditionally very dependent on personal services, have suffered faced a share rise in the cost of these services. A dishwashing machine cannot adequately replace a maid who remove the dishes from the table, washes them herself and then puts them away. A child care center cannot substitute for a nanny. A vacuum cleaner is a poor stand-in for an upstairs maid. If one wanted to trace the real income of the wealthy, which no one has yet done, one should build a price index of goods and services bought by the wealthy. I suspect that such an index would show that economic growth has reduced their income relative to that of the average person.

At the turn of the century, a professor at a respected college lived in a large four or five bedroom house with a housekeeper and perhaps a cook. Today he is likely to live in a small two bedroom house without any household help except a cleaning woman once-a-week. In a few years, even that help may be beyond the means of an upper middle class family. Perhaps the decline in status of the wealthy and the middle class that comes from economic growth explains much of the hostility it has created.

The Benefits of Growth

Economic advancement comes from an increase in the ability of workers to produce more goods and services with less labor, capital, and raw materials. Thus growth can take the form of higher levels of consumption, greater leisure, or both. In the past the advancement of the economy has resulted in more goods and services as well as shorter work-weeks and reduced years in the labor force. Even if we were to agree with the critics of consumerism that more goods add nothing worthwhile to human well-being, being able to manufacture the same level of output with less labor and raw materials would provide more leisure for people to enjoy — an unqualified benefit and a true measure of progress. The need for fewer resources would also mean a smaller burden on our environment — less mining and a cut in energy consumption — another gain for the world.

Growth appears to be an essential condition for the development of great art. The Renaissance flourished in wealthy Florence where the Medicis could support Raffael, Michelangelo, and Leonardo da Vinci. Shakespeare could flourish only in a London rich enough to sustain an active theater and to offer opportunities for playwrights (Baumol and Oates 1972). According to Professor William Baumol (1992), the creative geniuses of Mozart, Haydn, Gluck, Beethoven and Schubert would never had the opportunity to flourish except for the prosperity of Vienna at the end of the eighteenth and the beginning of the nineteenth centuries. Moreover consumerism played a major role: rivalry among the German courts and the wealthy bred a demand for new musical works. The existence of a large number of petty principalities and a growing bourgeoisie who demanded new compositions, together with technological developments, especially the invention of the piano, produced a vigorous market for composers that led many ambitious people to forgo the occupations of their fathers and become musicians.

Economic growth is neither unambiguously good nor bad. Many will benefit immediately from it. Most of us believe that virtually all will ultimately gain, although a minority of individuals and families may suffer in the transition. Wealthy oligarchs who monopolize a major industry, for example, may forfeit much of their wealth if imports are allowed to erode their profits. Even those individuals who lose from economic change may gain from an improvement in knowledge and technology which typically accompanies growth.

As noted, the major force improving living standards in the advanced industrialized countries derives from advances in science and the ensuing improvements in technology. As knowledge and understanding of nature develop, we learn more about ourselves and our bodies. Research provides the basis for modern theories of nutrition, hygiene and medicine. The central measures of progress — declining infant mortality, lengthening life

spans, increased education — are all products of science and technology. Further improvements require further expansion in knowledge of ourselves and our universe.

Not only does economic growth produce more goods and longer lives, but it results ultimately in a cleaner environment. Actually hunter-gatherer societies with controlled populations can remain for long periods in harmony with their environment, albeit only with small numbers spread over large areas. Higher concentrations of inhabitants can burden their habit. Improvements in hunting technology have led to the decimation of various species — primitive man with spears, for example, may have exterminated the woolly mammoths. Further economic advancement can put additional pressure on the environment and accelerate degradation. Some archeologists have traced the collapse of the Mayan civilization to inefficient and unscientific agricultural practices that eventually curtailed the capacity of the land to support the population.

In the modern world, many environmentalists assert that growth is either unsustainable or harmful to the globe. They point to noxious fumes blanketing the skies above major cities. They decry, as do we all, dead lakes and rivers that resemble sewers. They assert that the earth and its resources are finite, the consequence being that development must be limited, a point discussed in greater detail in a later chapter.

The actual record is better than environmentalists would have us believe. As mentioned in an earlier chapter, the evidence shows that the beginnings of economic growth do harm the habitat, but after a certain point, higher incomes nurture a cleaner world. Greater wealth heightens sensitivity to the environment, induces a greater willingness to devote resources to pollution control, and enhances knowledge about the importance of protecting the air and water. Professor Donald Coursey, a Washington University economist, has estimated that a rise in income of 1 percent leads to a 3 percent increase in spending on a cleaner environment (Fumento 1992: 2). Moreover, improved living standards result in less waste, since growth itself comes from utilizing resources more efficiently. To the extent that humans and industry need discard less into the air, water, or landfills, they generate less pollution. Richer is basically cleaner.

Even though high incomes generate less pollution, growth does disrupt relationships and impose costs, including straining the environment under some circumstances, should we therefore conclude that no economic development is better? A halt to economic progress would be disastrous. It would be a forerunner to stagnation and ultimately to a fall in well-being. Change is inevitable: long-run equilibrium is a fantasy of economists and ecologists.

Certain ecologists, such as Paul Ehrlich, have described unlimited growth as a cancer on society. Although this verdict is too extreme, exceedingly fast paced economic

development may be unwanted and unwarranted. The population of a country establishes the appropriate rate of growth through the actions of each individual. The public, through its saving's patterns, determines the amount of capital available for investment. Individuals make these decisions when planning for their own futures and the futures of their families. The funds set aside will fix the level of investment and hence the speed with which new technology evolves and is deployed. Thus the decisions of millions of individuals focusing on their own futures specify how fast income grows.

Whether the government should attempt to affect the rate of technological change is a knottier issue. Until the Second World War, individuals and a few businesses carried on virtually all of the research and development with the consequence that the private sector determined how fast innovation proceeded. As economists have pointed out, however, science and technology bestow benefits on a wider group than can typically profit from an investment in research. Business, though, ignores the benefits that go to the rest of society, funding research on the basis of its gain alone. If the profits to investors are inadequate to compensate for their risks, projects that might bring significant blessings to society may be ignored. As a result too few resources are devoted to discovery and invention. The gain from additional investment in this area would more than compensate for the risks and costs. This can justify the government's sponsoring research in order to achieve the appropriate amount of R & D — a level where additional spending no longer produces benefits that exceed costs.

The question then arises, "how much research should the government foster?" Given the costs of change occasioned by new technology, should not the state be careful in subsidizing scientific investigations? Moreover, technology is a public good — meaning that others can quickly and easily appropriate the knowledge gleaned from research. If the United States government fosters work leading to a breakthrough in technology, other countries can and will quickly become aware of the information and can often market the benefits. This realization has led to efforts to constrain the spread of technology. Such efforts go back centuries as countries have often prohibited scientists and others with special skills from emigrating or spreading their knowledge. Almost inevitably such attempts have eventually failed.

Nevertheless, business is unlikely to invest much in basic research, which will produce little profit and whose fruits will become public almost immediately. Consequently the state should aid such fundamental studies; the evidence is overwhelming that science has brought great gains to mankind that only a few might wish to eschew. The Industrial Revolution and the growth of scientific knowledge ushered in a decline in the death rate, an improvement in public health, and a reduction in the drudgery of work. On the other hand,

innovation and development has disrupted the lives of many men and women, which explains the efforts that many, such as the infamous Luddites, have made to constrain technology. Today Jeremy Rifken, director of the Foundation on Economic Trends, leads the effort to stop biotechnology from benefiting mankind. While people today do fear new technologies, as they did in the past, these innovations are neither more disruptive, nor more dangerous, nor less beneficial than previous ones.

The Role of Growth in Freedom

Economic growth promotes progress by expanding the freedom people can enjoy. The wealthier individuals are, the more they resent control by others. Conversely, as the previous chapter attested, lawful economic rights are essential to securing political liberty. In addition, economic freedom results in economic growth and higher standards of living. Thus liberty and economic advancement reinforce each other: freedom promotes growth; growth advances freedom; freedom stimulates more growth.

To profit by legal rights, people must possess sufficient income. Friedrich Hayek calls this the options people face. A person who has the legal right to travel may have insufficient income or wealth to exercise that prerogative. The privilege to travel freely will mean little to those too poor to afford the fares and expenses. The birthright of a black to purchase a home in any white community may be irrelevant if African-Americans fail to earn enough to afford housing in a desired area. Thus substantial per capita incomes may be necessary to put into practice many legal freedoms. Anatole France (1894: Ch. 7) phrased the same idea negatively when he wrote of, “The majestic egalitarianism of the law, which forbids rich and poor alike to sleep under bridges, to beg in the streets, and to steal bread.”

The law as well as financial considerations can restrict the liberty to travel — an important freedom. After the Second World War, the British government prohibited citizens from taking more than a token amount of money out of the country. While the English were entitled to travel, their liberties were almost as restricted as citizens of the Soviet Union, whose government prohibited its people from journeying outside the fatherland.

High incomes guarantee not only social freedoms but political rights as well. The prerogative to oppose the government is worthless if one has no resources with which to mount a campaign. This may explain why democracy works poorly in impoverished countries. It also explains why pressures for elected governments and political liberty blossom as incomes rise and a middle class develops. Economic growth, therefore, is vital for the maintenance and expansion of freedom. Those that disparage rising incomes

overlook or underrate their importance for all freedoms, political, social as well as economic.

The recent history of Hong Kong, Singapore, Taiwan, and Korea illustrate a few of these themes. Since the late 1950s or 1960s, these economies, sometimes referred to as the “four tigers,” have grown at extraordinary rates, well over 6 percent per year. The example of Hong Kong, a remote British colony with virtually no natural resources except for an excellent natural harbor, is especially educational (Rabushka 1979). At the end of World War II and after the communist took over mainland China, illiterate refugees from the mainland inundated Hong Kong. At the time, Great Britain under the Labor Government had determined to rid itself of its colonies and treated that city with benign neglect. Consequently the bureaucrats overseeing the crown colony followed a policy of almost total *laissez faire*, not from ideological conviction but from default.

The government imposed no tariffs, attempted no industrial policies, and refrained from interfering with business. The bureaucrats levied only light taxes and prescribed virtually no regulations. In the most unpromising conditions — massive numbers of illiterate immigrants, no foreign aid, and virtual isolation from the mainland — Hong Kong grew with extraordinary rapidity. Per capita income in Hong Kong has risen from very low levels to the highest in Asia outside of Japan, which started its growth much earlier, that is, in the 19th century. Birth rates which in 1950 had been comparable to those in most Third World countries, plummeted to below reproductive levels.

During all of the post-war period, the people of Hong Kong have enjoyed virtually total economic liberty and a high degree of social freedom as well. On the Gwartney-Block-Lawson index of economic freedom, Hong Kong enjoys, by far, the top ranking. The British government offered no democratic rights, although the press and speech were relatively unrestricted. Recently, as incomes have risen and spurred by fear of the upcoming mainland takeover, many residents have been agitating for the introduction of an elected city council.

Adam Smith concluded (1776: 538) that the reason the American colonies had prospered more than other European colonies was that they had had the “liberty to manage their own affairs their own way.” Except for a few controls on trade, not much of a restraint since the colonies were growing both in population and land so quickly, the English government left the Americans alone. The North American colonies, therefore, enjoyed virtually unlimited economic freedom — a condition that helped stimulate their strong economic performance. It also contributed to their dissatisfaction when the London government attempted to impose taxes on North Americans.

Singapore has been the second most successful economy among the Four Tigers because, in all probability, the government has organized the city as an almost totally free port. The government, however, has restricted not only political freedom but social freedoms. Despite its economic liberty, Singapore has been one of the most regimented societies in East Asia. There are laws against spitting, chewing gum, dropping litter, failing to flush a public toilet. Newspapers cannot criticize Singapore's leaders or policies; the bureaucracy restricted the sale of the *Wall Street Journal* after it had the temerity to criticize the city's administration.

The contrast between the two cities, Singapore and Hong Kong, is particularly enlightening. The government of Singapore has required the local population to save the highest percentage of their income in the world and has targeted specific industries for subsidies and investment. According to Robert Barro (1992: A12), investment has been so high in that city-state because of subsidies that its return has fallen to near zero. Moreover, the bureaucrats' industrial policies, which have generated the targeting, have depressed its economic growth to below Hong Kong's. As a consequence, the average consumption of a Singapore native is less than three-quarters of a citizen of Hong Kong. In other words, while Singapore has had as rapid a rate of growth overall as Hong Kong, its people have failed to garner the benefits. Government actions in Singapore demonstrate that industrial policies lower people's welfare, rather than promote them.

Both South Korea and Taiwan have inhibited political liberty and indulged in industrial policies. Business enjoys fewer rights in South Korea and Taiwan than in Hong Kong and their per capita incomes are significantly lower, although growing fast compared with most of the rest of the world. Neither country has prospered as much as Hong Kong, but in both states as incomes have risen so has the demand for free political processes. Grudgingly the ruling oligarchies of these two nations are inching towards a more liberal society. We see the same phenomenon in China where the main demand of the students in Tiananmen square was for more open society. After the military put down the demonstrations in Beijing, the Chinese bureaucracy modified economic liberalization in fear of fostering an uncontrolled movement towards a more liberal society.

Statistical evidence also relates liberty with improvements in the standards of living of the populace. Economic and political freedom are both correlated with growth. One economist, Gerald W. Scully of the University of Texas, found (1988: 652) that "Politically open societies, which subscribe to the rule of law, to private property, and to the market allocation of resources, grow at three times the rate and are two and one-half times as efficient as societies in which these freedoms are abridged." His study of 115 economies over the period 1960 to 1980 concluded (658) that those countries offering a

high degree of political liberty, civil rights, and economic freedom enjoyed an annual improvement in income per capita of 2.7 percent, while those offering none of those freedoms grew at a rate of less than 1 percent per head.

Economic freedom is only one, albeit one of the most important factors, in stimulating growth. Social mores, defined as willingness to work hard and to take chances while saving for the future, are also important variables in determining material advancement. Max Weber (1930) attributed the rise in income of the West to the Protestant ethic of hard work, honesty, and frugality. More recently Fukuyama contended (1992: 227) that important sects of Buddhism reinforced the work ethic in Japan. The Chinese, for whatever reason, have also exhibited a great willingness to work and save, and this may partially account for the remarkable economic records of Hong Kong, Singapore, and Taiwan.

The mores of hard work, frugality, and entrepreneurship can be suppressed by lack of market incentives or restraints on private enterprise and economic liberty. East Germany's restrictions on earnings and economic freedom produced a work force that wouldn't work. If taxes are so high that one cannot profit from hard work or investment, people will be described as lazy and unwilling to plan for the future. Mainland China, for example, which fixed incomes and prohibited private enterprise, showed none of the growth that other basically Chinese societies — Hong Kong, Taiwan, and Singapore — enjoyed. Recently Beijing encouraged the emergence of competitive markets and freed their masses to open businesses with the result that the coastal provinces have boomed.

In primitive tribes, customs circumscribing market behavior often impede endeavors to get ahead. The government need not formally levy taxes to pare incentives, as the example of East Germany demonstrates. Tribal customs that require members who generate a large gain to share it with their extended family or with the entire group can torpedo the spirit to advance. Social mores of this kind may have been optimal in primitive situations where chance determined whether an individual produced a large kill. Sharing under those circumstances made sense since it could insure the survival of the clan. In a modern context where investment, hard work, and willingness to take chances are more important determinants of the generation of wealth, such customs are counterproductive.

Conclusions

Economic freedom, but not political liberty or democracy, is essential for material progress, which in turn is vital for progress. Rising incomes go together with enhanced education and strengthened research and development. Without improvements in science and technology, the gains in terms of life expectancies and infant mortality would have been impossible. Democracy does little to promote economic growth, although it does not

act as a deterrent as some observers have claimed. Although freely elected governments are irrelevant for growth, wealthy societies do favor constitutional rule as well as cleaner environments.

Economic prosperity is spreading around the world, bringing with it greater freedoms and a hunger for democratic rule. The evidence also suggests that the rate of growth is snowballing, although ill-advised policies can act as a brake. Economic development does impose a burden on people, so extremely rapid rates of change may be unwelcome. Nevertheless, no country has achieved a rate of growth so rapid that the majority of its citizens have reported being distressed. Certain governments such as the Chinese, have feared that growth was excessive and would lead to inflation or to demands for political reform. The people of China, however, have welcomed the opportunities to acquire more goods and services and to prosper.

The next chapter will evaluate the factors that contribute most to growth. Although not mathematical, this discussion will be based largely on statistical studies of economic expansion. Some reader may prefer to skip to the summary at the end of the chapter.

This chapter has shown that economic freedom is essential for rising standards of living. That contrary to critics of a consumer society, growth is vital for human well-being. A rising standard of living yields satisfaction to the public, eases their comforts, pares their death rates, and exposes them to greater knowledge. Wealthy societies demand political rights and are more tolerant of minorities. Richer is better for most, cleaner for the economy, and safer for babies.